

CLAIMS

What is claimed is:

1. An optical measurement apparatus, comprising:
a light source and guiding module for providing a spontaneous emission light and transferring said spontaneous emission light to a linear incident light, and said linear incident light is passed through a detection area ; and
a receiving module for imaging and processing said linear incident light passed through said detection area.
2. The optical measurement apparatus according to claim 1, wherein said light source and guiding module comprises a light source module and a light-guiding apparatus, and said light-guiding apparatus is configured between said light source module and said detection area.
3. The optical measurement apparatus according to claim 2, wherein said light source module is selected from the group consisting of a LED light array and an OLED light array.
4. The optical measurement apparatus according to claim 2, wherein the geometric type of the light-guiding apparatus is selected from the group consisting of an arc-line-type wedge-shaped light-guiding apparatus and a straight-line-type wedge-shaped light-guiding apparatus.
5. The optical measurement apparatus according to claim 2, wherein the

filler inside said light-guiding apparatus is selected from the group consisting of glass, acrylics, and polycarbonate.

6. The optical measurement apparatus according to claim 2, wherein the exterior of the light-guiding apparatus is a combination of a plurality of reflection elements, said spontaneous emission light is reflected and transmitted by said reflection elements, and said plurality of reflection elements comprise a plurality of stainless steel sheets.

7. The optical measurement apparatus according to claim 2, wherein said light-guiding apparatus is the combination of a plurality of bundle fibers.

8. The optical measurement apparatus according to claim 2, wherein said optical measurement apparatus comprises an excitation filter, configured between said light source module and said detection area.

9. The optical measurement apparatus according to claim 2, wherein said optical measurement apparatus comprises a light-mending lens, configured between said light source module and said detection area, and the material of said light-mending lens is chosen from the group consisting of glass, acrylics, and polycarbonate.

10. The optical measurement apparatus according to claim 1, wherein said receiving module comprises an image module and an image-sensing module, and said image module is configured between said detection area and said image-sensing module.

11. The optical measurement apparatus according to claim 10, wherein said image module comprises a focusing lens.

12. The optical measurement apparatus according to claim 11, wherein said image module comprises a micro diffraction grating configured between said detection area and said focusing lens, and the image module comprises a projection lens between said focusing lens and said image-sensing module.

13. The optical measurement apparatus according to claim 10, wherein said image-sensing module comprises a filter lens and a dichroic mirror.

14. The optical measurement apparatus according to claim 10, wherein said image-sensing module comprises a sensor, and said sensor is selected from the group consisting of an area sensor and a linear sensor.

15. The optical measurement apparatus according to claim 1, further comprising a platform for supporting and transporting a test sample to move in one-dimension direction.

16. An optical measurement apparatus, comprising:

a light source module for providing a spontaneous emission light;

a light-guiding apparatus for transferring said spontaneous emission light to a linear incident light, and said linear incident light is passed through a detection area;

an image module for imaging said linear incident light passed through

said detection area; and

an image-sensing module for receiving and processing said linear incident light imaged by said image module.

17. The optical measurement apparatus according to claim 16, further comprising a platform for supporting and transporting ad test sample to move in one-dimension direction, and said test sample is placed on said detection area.

18. The optical measurement apparatus according to claim 16, wherein said light source module is selected from the group consisting of a LED light array and an OLED light array.

19. The optical measurement apparatus according to claim 16, wherein said optical measurement apparatus comprises an excitation filter for filtering said spontaneous emission light.

20. The optical measurement apparatus according to claim 16, wherein said optical measurement apparatus comprises a light-mending lens, configured between said light source module and said detection area, and the material of said light mending-lens is chosen from the group consisting of glass, acrylics, and polycarbonate.

21. The optical measurement apparatus according to claim 16, wherein the geometric type of the light-guiding apparatus is selected from the group consisting of an arc-line-type wedge-shaped light-guiding apparatus and a

straight-line-type wedge-shaped light-guiding apparatus.

22. The optical measurement apparatus according to claim 16, wherein the filler inside said light-guiding apparatus is selected from the group consisting of glass, acrylics, and polycarbonate.

23. The optical measurement apparatus according to claim 16, wherein the exterior of the light-guiding apparatus is a combination of a plurality of reflection elements, said spontaneous emission light is reflected and transmitted by said reflection elements, and said plurality of reflection elements comprise a plurality of stainless steel sheets.

24. The optical measurement apparatus according to claim 16, wherein said light-guiding apparatus is the combination of a plurality of light guiding pipe bundle fibers.

25. The optical measurement apparatus according to claim 16, wherein said image module comprises a focusing lens.

26. The optical measurement apparatus according to claim 16, wherein said image-sensing module comprises a filter lens and a dichroic mirror.

27. The optical measurement apparatus according to claim 16, wherein said image-sensing module comprises a sensor, and said sensor is selected from the group consisting of an area sensor module and a linear sensor module.